

Candidate Information

Position: Postdoctoral Research Fellow
School/Department: School of Natural and Built Environment
Reference: 25/112693
Closing Date: Monday 21 July 2025
Salary: £39,922 per annum
Anticipated Interview Date: Monday 11 August 2025
Duration: 36 Months

JOB PURPOSE:

To be an active member of the GEMINI (Geothermal Energy Momentum on the IslaNd of Ireland) research team assisting in the planning and delivery of the research activity within the areas of geothermal resources assessment, hydrogeology, numerical modelling and geophysics so that the overall research objectives of the UrbanARK project are met.

MAJOR DUTIES:

1. Develop and undertake research within the GEMINI project a member of the research team.
2. Design, develop and refine experimental models to obtain reliable data.
3. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
4. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
5. Prepare, often in consultation with the project team, material for publication in national and international journals and presentations at international conferences.
6. Assist grant holder in the preparation of funding proposals and applications to external bodies.
7. Carry out routine administrative tasks associated with the research project to ensure that the project is completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
8. Carry out occasional undergraduate supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
9. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines.

ESSENTIAL CRITERIA:

1. PhD in Geology, Hydrogeology, Geophysics, Engineering or a related discipline with a strong background in the assessment of geothermal resources and related modelling approaches.
2. Demonstrable track record of research in:
 - The evaluation of geothermal resources potential.
 - Interpretation and integration of relevant field data into models.
3. Ability to contribute to broader management and administrative processes.
4. Contribute to the Project's outreach programme by links with industry, community groups etc.
5. Demonstrable ability to devise, advise on and manage key sections in major projects.
6. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
7. Proven ability to communicate complex information clearly.
8. Proven ability to build contacts and participate in internal and external networks.
9. Demonstrable intellectual ability.
10. Proven ability to assess and organise resources.
11. Ability to work within a multidisciplinary team.

12. Willingness and ability to travel as required to engage with project team members across Ireland.

DESIRABLE CRITERIA:

1. Strong expertise in related research areas such as subsurface characterisation, hydrogeology, borehole geophysics and numerical heat & transport modelling.
2. Experience in the characterisation and monitoring of geothermal resources, in particular the use of Fibre-Optic Distributed Temperature Sensing and geophysical borehole logging.
3. Experience in numerical heat & transport modelling.
4. Experience with spatial data management and analysis tools.
5. Proven ability to contribute to international multi-disciplinary research teams.
6. Demonstrable ability to manage and motivate junior research staff.
7. Proven ability to engage with and manage contractors to deliver relevant field research infrastructure.

ADDITIONAL INFORMATION:

Informal Enquiries to Dr Ulrich Offerdinger: u.offerdinger@qub.ac.uk.